



PCF/09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,133

DATE: 08/26/2002

TIME: 14:04:57

Input Set : A:\pf0589usn_seqlist.txt

Output Set: N:\CRF3\08262002\I786133.raw

P.7

ENTERED

4 <110> APPLICANT: INCYTE PHARMACEUTICALS, INC.
 5 AU-YOUNG, Janice
 6 BANDMAN, Olga
 7 TANG, Y. Tom
 8 REDDY, Roopa
 9 HILLMAN, Jennifer L.
 10 YUE, Henry
 11 LAL, Preeti
 12 CORLEY, Neil C.
 13 GUEGLER, Karl J.
 14 GORGONE, Gina
 15 BAUGHN, Mariah R.
 16 AZIMZAI, Yalda
 18 <120> TITLE OF INVENTION: HUMAN MEMBRANE CHANNEL PROTEINS
 20 <130> FILE REFERENCE: PF-0589 PCT
 C--> 22 <140> CURRENT APPLICATION NUMBER: US/09/786,133
 C--> 23 <141> CURRENT FILING DATE: 2002-08-26
 25 <150> PRIOR APPLICATION NUMBER: 09/145,815; unassigned; 09/191,283; unassigned;
 09/208,821; unassigned
 W--> 26 09/237,506; unassigned; 09/247,891; unassigned
 W--> 27 <151> PRIOR FILING DATE: 1998-09-02; 1998-09-02; 1998-11-12; 1998-11-12; 1998-12-09;
 1998-12-09
 W--> 28 1999-01-26; 1999-01-26; 1999-02-10; 1999-02-10
 30 <160> NUMBER OF SEQ ID NOS: 45
 32 <170> SOFTWARE: PERL Program
 34 <210> SEQ ID NO: 1
 35 <211> LENGTH: 724
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Homo sapiens
 39 <220> FEATURE:
 40 <221> NAME/KEY: misc_feature
 41 <223> OTHER INFORMATION: Incyte ID No: 1568324CD1
 43 <400> SEQUENCE: 1
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 45 1 5 10 15
 46 Pro Glu Ala Gly Ser Glu Gln Glu Val Phe Ser Ala Val Glu Gly
 47 20 25 30
 48 Pro Ser Ala Glu Glu Thr Pro Ser Asp Thr Glu Ser Pro Glu Val
 49 35 40 45
 50 Leu Glu Thr Gln Leu Asp Ala His Gln Gly Leu Leu Gly Met Asp
 51 50 55 60
 52 Pro Pro Gly Asp Met Val Asp Phe Val Ala Ala Glu Ser Thr Glu
 53 65 70 75
 54 Asp Leu Lys Ala Leu Ser Ser Glu Glu Glu Glu Met Gly Gly

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```

56 Ala Ala Gln Glu Pro Glu Ser Leu Leu Pro Pro Ser Val Leu Asp
57          95          100          105
58 Gln Ala Ser Val Ile Ala Glu Arg Phe Val Ser Ser Phe Ser Arg
59          110          115          120
60 Arg Ser Ser Val Ala Gln Glu Asp Ser Lys Ser Ser Gly Phe Gly
61          125          130          135
62 Ser Pro Arg Leu Val Ser Arg Ser Ser Ser Val Leu Ser Leu Glu
63          140          145          150
64 Gly Ser Glu Lys Gly Leu Ala Arg His Gly Ser Ala Thr Asp Ser
65          155          160          165
66 Leu Ser Cys Gln Leu Ser Pro Glu Val Asp Ile Ser Val Gly Val
67          170          175          180
68 Ala Thr Glu Asp Ser Pro Ser Val Asn Gly Met Glu Pro Pro Ser
69          185          190          195
70 Pro Gly Cys Pro Val Glu Pro Asp Arg Ser Ser Cys Lys Lys Lys
71          200          205          210
72 Glu Ser Ala Leu Ser Thr Arg Asp Arg Leu Leu Leu Asp Lys Ile
73          215          220          225
74 Lys Ser Tyr Tyr Glu Asn Ala Glu His His Asp Ala Gly Phe Ser
75          230          235          240
76 Val Arg Arg Arg Glu Ser Leu Ser Tyr Ile Pro Lys Gly Leu Val
77          245          250          255
78 Arg Asn Ser Ile Ser Arg Phe Asn Ser Leu Pro Arg Pro Asp Pro
79          260          265          270
80 Glu Pro Val Pro Pro Val Gly Ser Lys Arg Gln Val Gly Ser Arg
81          275          280          285
82 Pro Thr Ser Trp Ala Leu Phe Glu Leu Pro Gly Pro Ser Gln Ala
83          290          295          300
84 Val Lys Gly Asp Pro Pro Pro Ile Ser Asp Ala Glu Phe Arg Pro
85          305          310          315
86 Ser Ser Glu Ile Val Lys Ile Trp Glu Gly Met Glu Ser Ser Gly
87          320          325          330
88 Gly Ser Pro Gly Lys Gly Pro Gly Gln Gly Gln Ala Asn Gly Phe
89          335          340          345
90 Asp Leu His Glu Pro Leu Phe Ile Leu Glu Glu His Glu Leu Gly
91          350          355          360
92 Ala Ile Thr Glu Glu Ser Ala Thr Ala Ser Pro Glu Ser Ser Ser
93          365          370          375
94 Pro Thr Glu Gly Arg Ser Pro Ala His Leu Ala Arg Glu Leu Lys
95          380          385          390
96 Glu Leu Val Lys Glu Leu Ser Ser Ser Thr Gln Gly Glu Leu Val
97          395          400          405
98 Ala Pro Leu His Pro Arg Ile Val Gln Leu Ser His Val Met Asp
99          410          415          420
100 Ser His Val Ser Glu Arg Val Lys Asn Lys Val Tyr Gln Leu Ala
101          425          430          435
102 Arg Gln Tyr Ser Leu Arg Ile Lys Ser Asn Lys Pro Val Met Ala
103          440          445          450
104 Arg Pro Pro Leu Gln Trp Glu Lys Val Ala Pro Glu Arg Asp Gly

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```

105          455          460          465
106 Lys Ser Pro Thr Val Pro Cys Leu Gln Glu Glu Ala Gly Glu Pro
107          470          475          480
108 Leu Gly Gly Lys Gly Lys Arg Lys Pro Val Leu Ser Leu Phe Asp
109          485          490          495
110 Tyr Glu Gln Leu Met Ala Gln Glu His Ser Pro Pro Lys Pro Ser
111          500          505          510
112 Ser Ala Gly Glu Met Ser Pro Gln Arg Phe Phe Phe Asn Pro Pro
113          515          520          525
114 Ala Val Ser Gln Arg Thr Thr Ser Pro Gly Gly Arg Pro Ser Ala
115          530          535          540
116 Arg Ser Pro Leu Ser Pro Thr Glu Thr Phe Ser Trp Pro Asp Val
117          545          550          555
118 Arg Glu Leu Cys Ser Lys Tyr Ala Ser Arg Asp Glu Ala Arg Arg
119          560          565          570
120 Ala Gly Gly Gly Arg Pro Arg Gly Pro Pro Val Asn Arg Ser His
121          575          580          585
122 Ser Val Pro Glu Asn Met Val Glu Pro Pro Leu Ser Gly Arg Val
123          590          595          600
124 Gly Arg Cys Arg Ser Leu Ser Thr Lys Arg Gly Arg Gly Gly Gly
125          605          610          615
126 Glu Ala Ala Gln Ser Pro Gly Pro Leu Pro Gln Ser Lys Pro Asp
127          620          625          630
128 Gly Gly Glu Thr Leu Tyr Val Thr Ala Asp Leu Thr Leu Glu Asp
129          635          640          645
130 Asn Arg Arg Val Ile Val Met Glu Lys Gly Pro Leu Pro Ser Pro
131          650          655          660
132 Thr Ala Gly Leu Glu Glu Ser Ser Gly Gln Gly Pro Ser Ser Pro
133          665          670          675
134 Val Ala Leu Leu Gly Gln Val Gln Asp Phe Gln Gln Ser Ala Glu
135          680          685          690
136 Cys Gln Pro Lys Glu Glu Gly Ser Arg Asp Pro Ala Asp Pro Ser
137          695          700          705
138 Gln Gln Gly Arg Val Arg Asn Leu Arg Glu Lys Phe Gln Ala Leu
139          710          715          720
140 Asn Ser Val Gly
143 <210> SEQ ID NO: 2
144 <211> LENGTH: 257
145 <212> TYPE: PRT
146 <213> ORGANISM: Homo sapiens
148 <220> FEATURE:
149 <221> NAME/KEY: misc_feature
150 <223> OTHER INFORMATION: Incyte ID No: 4094907CD1
152 <400> SEQUENCE: 2
153 Met Ser Arg Pro Leu Ile Thr Arg Ser Pro Ala Ser Pro Leu Asn
154   1          5          10          15
155 Asn Gln Gly Ile Pro Thr Pro Ala Gln Leu Thr Lys Ser Asn Ala
156          20          25          30
157 Pro Val His Ile Asp Val Gly Gly His Met Tyr Thr Ser Ser Leu

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Input Set : A:\pf0589usn_seqlist.txt

Output Set: N:\CRF3\08262002\I786133.raw

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158          35          40          45
159 Ala Thr Leu Thr Lys Tyr Pro Glu Ser Arg Ile Gly Arg Leu Phe
160          50          55          60
161 Asp Gly Thr Glu Pro Ile Val Leu Asp Ser Leu Lys Gln His Tyr
162          65          70          75
163 Phe Ile Asp Arg Asp Gly Gln Met Phe Arg Tyr Ile Leu Asn Phe
164          80          85          90
165 Leu Arg Thr Ser Lys Leu Leu Ile Pro Asp Asp Phe Lys Asp Tyr
166          95         100         105
167 Thr Leu Leu Tyr Glu Glu Ala Lys Tyr Phe Gln Leu Gln Pro Met
168         110         115         120
169 Leu Leu Glu Met Glu Arg Trp Lys Gln Asp Arg Glu Thr Gly Arg
170         125         130         135
171 Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
172         140         145         150
173 Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu
174         155         160         165
175 Glu Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn
176         170         175         180
177 Ala Gly Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu
178         185         190         195
179 Asn Gly Tyr Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu
180         200         205         210
181 Gln Gln Arg Gly Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val
182         215         220         225
183 Asp Ser Ser Gln Phe Ser Glu Tyr Val Leu Arg Arg Glu Leu Arg
184         230         235         240
185 Arg Thr Pro Arg Val Pro Ser Val Ile Arg Ile Lys Gln Glu Pro
186         245         250         255
187 Leu Asp
190 <210> SEQ ID NO: 3
191 <211> LENGTH: 377
192 <212> TYPE: PRT
193 <213> ORGANISM: Homo sapiens
195 <220> FEATURE:
196 <221> NAME/KEY: misc_feature
197 <223> OTHER INFORMATION: Incyte ID No: 518158CD1
199 <400> SEQUENCE: 3
200 Met Gly Gly Asp Leu Val Leu Gly Leu Gly Ala Leu Arg Arg Arg
201   1          5          10         15
202 Lys Arg Leu Leu Glu Gln Glu Lys Ser Leu Ala Gly Trp Ala Leu
203          20          25          30
204 Val Leu Ala Gly Thr Gly Ile Gly Leu Met Val Leu His Ala Glu
205          35          40          45
206 Met Leu Trp Phe Gly Gly Cys Ser Trp Ala Leu Tyr Leu Phe Leu
207          50          55          60
208 Val Lys Cys Thr Ile Ser Ile Ser Thr Phe Leu Leu Leu Cys Leu
209          65          70          75
210 Ile Val Ala Phe His Ala Lys Glu Val Gln Leu Phe Met Thr Asp

```

RAW SEQUENCE LISTING

DATE: 08/26/2002

PATENT APPLICATION: US/09/786,133

TIME: 14:04:57

Input Set : A:\pf0589usn_seqlist.txt

Output Set: N:\CRF3\08262002\I786133.raw

```

211          80          85          90
212 Asn Gly Leu Arg Asp Trp Arg Val Ala Leu Thr Gly Arg Gln Ala
213          95          100          105
214 Ala Gln Ile Val Leu Glu Leu Val Val Cys Gly Leu His Pro Ala
215          110          115          120
216 Pro Val Arg Gly Pro Pro Cys Val Gln Asp Leu Gly Ala Pro Leu
217          125          130          135
218 Thr Ser Pro Gln Pro Trp Pro Gly Phe Leu Gly Gln Gly Glu Ala
219          140          145          150
220 Leu Leu Ser Leu Ala Met Leu Leu Leu Gly Leu Thr Leu Gly Leu
221          155          160          165
222 Trp Leu Thr Thr Ala Trp Val Leu Ser Val Ala Glu Arg Gln Ala
223          170          175          180
224 Val Asn Ala Thr Gly His Leu Ser Asp Thr Leu Trp Leu Ile Pro
225          185          190          195
226 Ile Thr Phe Leu Thr Ile Gly Tyr Gly Asp Val Val Pro Gly Thr
227          200          205          210
228 Met Trp Gly Lys Ile Val Cys Leu Cys Thr Gly Val Met Gly Val
229          215          220          225
230 Cys Cys Thr Ala Leu Leu Val Ala Val Val Ala Arg Lys Leu Glu
231          230          235          240
232 Phe Asn Lys Ala Glu Lys His Val His Asn Phe Met Met Asp Ile
233          245          250          255
234 Gln Tyr Thr Lys Glu Met Lys Glu Ser Ala Ala Arg Val Leu Gln
235          260          265          270
236 Glu Ala Trp Met Phe Tyr Lys His Thr Arg Arg Lys Glu Ser His
237          275          280          285
238 Ala Ala Arg Arg His Gln Arg Lys Leu Leu Ala Ala Ile Asn Ala
239          290          295          300
240 Phe Arg Gln Val Arg Leu Lys His Arg Lys Leu Arg Glu Gln Val
241          305          310          315
242 Asn Ser Met Val Asp Ile Ser Lys Met His Met Ile Leu Tyr Asp
243          320          325          330
244 Leu Gln Gln Asn Leu Ser Ser Ser His Arg Ala Leu Glu Lys Gln
245          335          340          345
246 Ile Asp Thr Leu Ala Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu
247          350          355          360
248 Ser Thr Ala Leu Gly Pro Arg Gln Leu Pro Glu Pro Ser Gln Gln
249          365          370          375
250 Ser Lys
253 <210> SEQ ID NO: 4
254 <211> LENGTH: 491
255 <212> TYPE: PRT
256 <213> ORGANISM: Homo sapiens
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <223> OTHER INFORMATION: Incyte ID No: 602926CD1
262 <400> SEQUENCE: 4
263 Met Val Phe Gly Glu Phe Phe His Arg Pro Gly Gln Asp Glu Glu

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/786,133

DATE: 08/26/2002
TIME: 14:04:58

Input Set : A:\pf0589usn_seqlist.txt
Output Set: N:\CRF3\08262002\I786133.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:26; N Pos. 790,827,860

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 25,27

VERIFICATION SUMMARY

DATE: 08/26/2002

PATENT APPLICATION: US/09/786,133

TIME: 14:04:58

Input Set : A:\pf0589usn_seqlist.txt

Output Set: N:\CRF3\08262002\I786133.raw

L:22 M:270 C: Current Application Number differs, Replaced Current Application Number
L:23 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:26 M:259 W: Allowed number of lines exceeded, <150> PRIOR APPLICATION NUMBER:
L:27 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:28 M:259 W: Allowed number of lines exceeded, <151> PRIOR FILING DATE:
L:1432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:780
L:1433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:840